E&MJ METAL AND MINERAL MARKETS

WEEKLY MARKET INFORMATION ISSUED BY THE PUBLISHERS OF ENGINEERING AND MINING JOURNAL

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THIS WEEK IN THE MARKETS . . .

Consumers feel better about the long-term supply outlook. Along with producers of nonferrous metals, they look for a more orderly market and a gradual easing of the controls. Limitations on use of lead were abandoned last week.

GENERAL

The British Ministry of Supply is negotiating to sell 20,000 tons of lead to our Government at the U. S. ceiling price to reduce its holdings and obtain dollars. A similar deal for 30,000 tons was closed in February. The metal goes into the stockpile.

COPPER – 24½c. Valley (export 27½c.)

Uncertainty over the Chilean agreement continues. However, the premium market abroad remains unsettled, particularly where forward metal is involved. The outside foreign market settled at around 40c. on nearby copper, 38c. on third quarter, with little interest in fourth-quarter metal.

NPA announced that March allocations will total 106,500 tons, which compares with 106,800 tons released in February and 120,000 tons in January.

Sales of copper for February shipment to domestic fabricators totaled 96,271 tons. Business booked to date in March copper amounts to about 45,000 tons.

The price situation here remains unchanged, with domestic copper moving on the basis of 24½c. Valley, and foreign at 27½c., f.a.s. N.Y.

LEAD – 19c. N. Y. (f.a.s. Gulf 19c.)

NPA, on March 3, lifted its controls on consumption of lead and extended permitted inventory levels to 60 days. Under the amended order (M-38), refiners, dealers and consumers will continue to file monthly reports with the Bureau of Mines.

The Lead Producers Advisory Committee met with NPA officials yesterday with a view toward suspending the allocation of lead. The industry is hopeful that allocation will be dropped soon. The Lead Industries Association believes that total lead supply in 1952 will exceed 1,300,000 tons, or 150,000 tons more than in 1951.

Intake of battery plates has been heavy and the smelting charge now varies between $47.50 and $50 per ton. Prior to this week one smelter was down to $42.50.

Sales of lead in the domestic market last week totaled 12,819 tons.

ZINC – 19½c. E. St. Louis (foreign 21½-22c.)

Metal released from 1952 stockpile contracts figured in tonnages sold during the last week. Additional allocations were largely for the galvanizing grade. Die casters were encouraged on reports that the automobile industry may be able to produce 1-million cars in the second quarter.

Domestic zinc continued firm on the basis of 19½c. for Prime Western.

Foreign zinc in the world market was unsettled.

TIN – $1.21½, N. Y.

The conflict over establishing acceptable terms on new contracts with Indonesia and Belgium continues. The RFC maintained its quotation here at $1.21½ all week. Consumers obtained 3,967 tons of tin so far this month from Government sources.

QUICKSILVER – $207-$210, N. Y.

Spot offerings were restricted to small lots and the market settled at $207 to $210 per flask, up $5 compared with a week ago. Demand at the higher price level slackened appreciably.

SILVER – 88c., N. Y. (London 77d.)

Business was moderate and prices unchanged here and in London.

E&MJ AVERAGE PRICES – FEBRUARY, 1952

Copper, domestic, refinery	24.200
Copper, export, refinery	27.425
Lead, common, New York	19.000
Lead, common, E. St. Louis	18.800
Silver, New York, per oz.	88.000
Silver, London, per oz.	77.000
Sterling exchange, "checks"	278.066
Zinc, Prime Western, E. St. Louis	19.500
Tin, New York, "Straits"	121.500
Tin, New York, 99%	(e)120.500
Gold, per oz., U.S. price	$35.000
Quicksilver, N.Y., per flask, 76-lb.	$202.000
Antimony, New York, boxed (d)	53.350
Antimony, bulk, f.o.b. Laredo	50.000
Antimony, boxed, f.o.b. Laredo	50.500
Platinum, refined, per oz.	$90.000
Cadmium (a)	255.000
Cadmium (b)	267.500
Cadmium (c)	280.000
Cobalt, 97% grade	240.000
Aluminum, 99%, ingot	19.000
Magnesium, ingot	24.500
Nickel (f)	56.500

(a) Average based on producers' quotation. (b) Average of producers' and platers' quotation. (c) Average of quotation on special shapes to platers. (d) Domestic, 5 tons or more but less than carload lot, boxed. (e) Price for tin contained.

The Maytag Company Uses **Federated** Aluminum Ingot

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E&MJ METAL AND MINERAL MARKETS

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Quebec Titanium Smelter To Increase Production

Quebec Iron & Titanium Corp., subsidiary of Kennecott Copper Co. and New Jersey Zinc Co., is scheduled to increase capacity at the Sorel, Quebec, titanium smelter from 300 tons of ilmenite per day to 1,500 tons by early 1953, according to an article describing the property in the current issue of *Engineering & Mining Journal*. On the basis of present operating results, it is expected that 1,500 tons of ilmenite will yield 660 tons of marketable titanium-rich slag running about 70% or more TiO_2, and 480 tons of refined iron. During initial operation with a single furnace in 1951, the company delivered 5,600 gross tons of iron and 5,200 gross tons of steel to the Hamilton-Montreal area; and 7,200 gross tons of slag to U.S. pigment producers.

Expenditures on the Q.I.T. project up to Jan. 1, 1952 totaled some $34.3 million, including $4.8 million for exploration, development, and construction at the mine at Allard Lake; $7.7 million for the 27-mile railroad from mine to Havre St. Pierre; $3.2 million for the Havre St. Pierre terminal; and $18.6 million for construction and experimental operations at the smelter at Sorel.

Ilmenite ore running about 34% TiO_2 is smelted in 300-ton electric furnaces to produce a titanium-rich slag, and a crude iron containing about 0.61% sulphur which is further refined in tilting-type electric furnaces to yield a low-sulphur iron or steel. The ilmenite smelting process is essentially a reducing one in which 285 lb. of coal is added per ton of ilmenite treated.

Mine production by open-pit methods at Allard Lake will be increased to 3,000 tons per day during the year. Average grade of ore in the 100-million ton Main orebody, and in the 12-million ton Cliff orebody is 32% TiO_2 and 36% Fe. Some 200,000 tons of ore averaging 35% TiO_2 and 40% Fe. has been removed from the now idle Grader orebody.

Present mining is confined to the Main orebody where 25-ft. benches expose massive, solid ilmenite faces with very little waste interspersed. By the end of 1951, some 473,000 tons of ore had been delivered from the mine to the smelter via the 550-mile waterway from Havre St. Pierre to Sorel.

Titanium smelting is a power-consuming process, and as in aluminum production, the ore moves from mine to a source of cheap power rather than the power to the mine. Shawinigan Water and Power Co. has contracted to supply some 160,000 hp. to the Sorel plant.

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DMPA Closes Deal for Falconbridge Nickel

The Government will purchase 25,000 tons of nickel over the next nine years from Falconbridge Nickel Mines, Ltd., of Canada, under the terms of a contract entered into by the company and the Defense Materials Procurement Agency. Purchase of up to 1,500,000 lb. of cobalt is included in the deal.

Additional options in the contract provide for possible sale of 12,500 tons of copper and 12,500 tons of nickel during the life of the contract.

The company has agreed that until the end of 1956 not less than 40% of its entire production of nickel and cobalt will be offered to the American market. The agreement involves a Government advance of $6 million to the Canadian producer for expansion of its capacity.

The ore will be taken from the company's mines in the Sudbury District of Ontario, including the McKim and Hardy mines. After smelting in the Falconbridge smelter, the resulting matte will be shipped for refining to the company's Norwegian refinery at Kristiansand, which is the point of delivery to the United States.

Basic price to be paid for the nickel is 56.66c. per lb., f.o.b. vessel, Kristiansand, which may be varied up or down in the event of future fluctuations in the quoted market price. Cobalt will be bought at $1.80 per lb. or the current quotation, whichever is higher. Sale of electrolytic copper in cathode form, if tendered, will be at 19c. per lb.

The Falconbridge contract is the first negotiated by DMPA to obtain vitally-needed nickel from sources outside the continental United States. However, the General Services Administration on Feb. 6 announced that the United States-owned Nicaro nickel plant in Cuba was back in production.

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Long-Term Sales Deal for White Pine Copper Co.

The Defense Materials Procurement Agency signed an agreement on Feb. 26 with the White Pine Copper Co., a subsidiary of Copper Range Co., which, along with a recently-announced loan of $57,185,000 by the Reconstruction Finance Corporation, will increase the annual domestic output of the metal by 36,000 tons.

Jess Larson, administrator of DMPA, said the copper will be produced from the company's White Pine Mine located at White Pine, Ontonagon County, Mich.

The company will use the proceeds of the RFC loan to develop the orebody for mining and to build necessary facilities to produce the copper, including a mill, smelter, townsite, railroad and power plant.

DMPA will guarantee the company a price of 25½c. per lb., f.o.b. Connecticut Valley, for 243,050 tons of the first 275,000 tons of copper produced by the new facilities, and has an option to purchase the entire output of the project over the contract period.

DMPA's agreement with the company expires on Dec. 31, 1961, or when the company has recovered $28,665,000 through its operation of the project, whichever occurs sooner. The new facilities are expected to be in full production by the end of 1954.

This is the fifth major agreement DMPA has reached with producers to step up the production of refined copper, and brings to 145,000 tons the total annual increase in domestic production resulting from these agreements.

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Point Comfort Aluminum

The first of two new smelting lines at the Point Comfort Works of the Aluminum Company of America, near Port Lavaca, Tex., began producing aluminum on Feb. 28, George H. Stout, manager, announced. The new line increases output at the plant to about 135-million lb. of aluminum a year. The second new line is scheduled for completion within three months.

The Government will get first call for five years on the output of the two units under a contract signed last fall.

Alcoa's Point Comfort Works was the first to adopt the radial gas engine for generating power in making aluminum. The capacity of the power plant is being raised from 120,000 kw to about 200,000 kw. On completion, the smelting facilities will have 194 radial gas engines operating on natural gas in its power plant.

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Steel Rate at 101.3%

The operating rate of the steel industry rose to 101.3%, equivalent to 2,104,000 tons for the week, a new high.

Miscellaneous Metals

Quotations cover wholesale lots, f.o.b. New York, unless otherwise specified.

ALUMINUM—Per lb., base price, f.o.b. shipping point: 30 lb. ingot, 99% plus, 19c., in pigs, 18c.

Base prices on aluminum ingot of higher purity: 99.75%, 19½c.; 99.8%, 20c.; 99.85%, 21c.; 99.9%, 22c.

ANTIMONY—Per lb., 99½% grade:

	Domestic Boxed (a) New York	Domestic Bulk (b) Laredo
Feb. 28	53.350	50.000
Feb. 29	53.350	50.000
March 1	53.350	50.000
March 3	53.350	50.000
March 4	53.350	50.000
March 5	53.350	50.000

(a) Boxed (224 lb.), 10,000 lb. or more but less than carload. (b) In bulk, carload, f.o.b. Laredo; boxed one-half cent extra.

BISMUTH—Per lb., in ton lots, $2.25.

CADMIUM—Per lb., delivered.

	Commercial Sticks	Special (a) Shapes
Feb. 28	$2.55	$2.80
Feb. 29	2.55	2.80
March 1	2.55	2.80
March 3	2.55	2.80
March 4	2.55	2.80
March 5	2.55	2.80

(a) Special shapes to platers

CALCIUM—Per lb., in ton lots, cast in slabs and small pieces, $2.05.

CHROMIUM—Per lb., 97 percent grade, spot, $1.12; contract $1.07 per lb. (Usually sold as chrome-metal.)

COBALT—Per lb., rondelles or granules, in 500 to 600 lb. containers, $2.40; in 100 lb. containers, $2.42; less than 100 lb. containers, $2.47. Prices f.o.b. N. Y. or Niagara Falls, freight collect.

COLUMBIUM—No quotation. Pricing under prevailing conditions "subject to special terms."

GERMANIUM—Per lb. $180.

INDIUM—Per oz. troy, 99.9 percent pure, $2.25.

LITHIUM—Per lb. 98%, $9.85@$11, depending on quantity.

MAGNESIUM—Per lb., f.o.b. producer's plant, ingots (4x6 in.), 99.8 percent, carload lots, 24½c.; 100 lb. or more, l.c.l., 26½c. Extruded sticks, carload lots, 32½c.; 100 lb. or more, l.c.l. 34½c.

MANGANESE—Per lb. Minimum 96 percent Mn, maximum 2 percent iron, carload lots, bulk, 29c.; packed in cases, 35½c.

Electrolytic manganese 99.9 percent Mn, 28c., carload lots.

MOLYBDENUM—Per lb., 99 percent $3.00.

NICKEL—Per lb., electrolytic cathodes, f.o.b. Port Colborne, Ont., contract price, 56½c. U.S. import duty included. Nickel oxide sinter, 52½c. per lb. of nickel content, f.o.b. Copper Cliff.

OSMIUM—Per oz., $200, nominal.

PALLADIUM—Per oz. troy, $24.

PLATINUM—Per oz. troy, $90 on wholesale lots; $93 on sales to consumers.

QUICKSILVER—Per flask of 76 lb., $207@$210.

RADIUM—Per mg. radium content, $20@$25, as to quantity.

RHODIUM—Per oz. troy, $125.

RUTHENIUM—Per oz. troy, $90@$93.

SELENIUM—Per lb. $3.00@$3.50 for black, powdered, 99.5 percent pure.

SILICON—Per lb., minimum, 97 percent Si, maximum 1 percent Fe, crushed, carload lots, in bulk, 20c.

SODIUM—Per lb., carload lots, in drums, 16½c.; less than carload lots, 17c.

TANTALUM—Per kilo, base price, $160.60 for rod; sheet, $143. Discounts on volume business.

TELLURIUM—Per lb., $1.75.

THALLIUM—Per lb., $12.50.

TITANIUM—Per lb., 96@98%, $5.

TUNGSTEN—Per lb., 98.8 percent minimum 1,000 lb. lots, $6.00 Hydrogen reduced tungsten, 99.9 percent plus $7.75. Ceiling prices effective May 7.

ZIRCONIUM—Per lb., powder, $7 to $8, according to quantity.

Metallic Ores

Prices in tons of 2,000 lbs., or "units" of 20 lb., unless otherwise stated.

ANTIMONY ORE—Per unit of antimony contained, 50 to 55 percent, $5.00@$5.20; 58 to 60 percent $5.25@$5.40; 60 to 65 percent, $6.50@$6.70.

BERYLLIUM ORE—Per unit of BeO contained 10 to 12% f.o.b. mine, Colorado, nominal. North Carolina, $34@$37.

Imported ore, basis 10% BeO, $36.50 per unit, c.i.f. U.S. ports.

CHROME ORE—Per long ton, dry basis, subject to penalties if guarantees are not met, f.o.b. cars New York, Philadelphia, Baltimore, etc.

Indian and Rhodesian:
- 48% Cr_2O_3, 3 to 1 ratio lump ..... $43.00@$45.00
- 48% Cr_2O_3, 2.8 to 1 ratio ..... $40.00@$42.00
- 48% Cr_2O_3, no ratio ..... $31.00@$32.00

South African (Transvaal):
- 48% Cr_2O_3, no ratio ..... $34.00@$35.00
- 44% Cr_2O_3, no ratio ..... $27.00@$28.00

Turkish:
- 48% Cr_2O_3, 3 to 1 ratio, lump ..... $54@$55

Brazilian:
- 44% Cr_2O_3, 2.5 to 1 ratio, lump ..... (a) $32.00

(a) Nominal.

COBALT ORE—Per lb. of cobalt contained, $1.35@$1.45, f.o.b. Cobalt, Ont., depending on grade.

MANGANESE ORE—The steel industry was more active in taking on nearby ore and on average moderately higher prices were paid. Indian ore was firmer at $1.22@$1.27 per long ton unit of Mn, c.i.f. U.S. ports, duty extra, basis 46 to 48% Mn, nearby positions.

On long-term contracts for ore from various sources the quotations are nominal at 90 to 95c., c.i.f. duty extra.

MOLYBDENUM ORE—Per lb. of contained MoS_2, 90% concentrate, 60c., f.o.b. mines.

E. & M. J. Weighted Index of Non-Ferrous Metal Prices

100 is composite for 1922-3-4. (Copper, Lead, Zinc, Tin, Silver, Nickel, Aluminum)

1940	79.22	1946	110.06
1941	83.49	1947	149.46
1942	86.80	1948	168.38
1943	88.74	1949	151.97
1944	88.74	1950	156.42
1945	90.86	1951	190.16

	1950	1951	1952
January	135.86	192.48	193.83
February	135.65	194.06	195.10
March	132.60	190.19	.....
April	134.04	190.18	.....
May	142.02	189.47	.....
June	154.30	187.19	.....
July	156.40	186.46	.....
August	160.67	186.15	.....
September	172.56	186.15	.....
October	179.83	193.21	.....
November	186.00	193.17	.....
December	187.05	193.17	.....

TANTALUM ORE—Per lb. Ta_2O_5, $2.00@$2.25 for 56@60% concentrate.

TITANIUM ORE—Per gross ton, ilmenite, 56 to 59 percent TiO_2, f.o.b. Atlantic seaboard, $16@$18, nominal.

Rutile, per lb., minimum 94% concentrate, 4@5c., nominal.

TUNGSTEN ORE—Per short ton unit of WO_3, domestic concentrates of known good analysis, basis 60%: Ceiling price established at $65, effective April 6.

Western high grade scheelite concentrate, $65, per unit, f.o.b. mine.

North Carolina high grade concentrate, $65 per unit, f.o.b. mine.

London quotes 485s. per long ton unit or WO_3, c.i.f. U.K. ports.

VANADIUM ORE—Per lb. V_2O_5 contained, domestic, 31c., f.o.b. mine.

ZIRCON ORE (sand)—Per long ton, c.i.f. Atlantic seaboard, minimum 65 percent ZrO_2, $47@$50.

Metallic Compounds

ARSENIOUS OXIDE (arsenic trioxide), refined, white, minimum 99 percent—Per lb., 6½c., in barrels carload lots delivered.

COBALT OXIDE—Ceramic grade 72½ to 73½% Co, $1.82 per lb. east of Mississippi, and $1.84½ per lb. west of Mississippi. Quotations are for oxide packed in 350-lb. containers.

COPPER SULPHATE—Per lb., in carload lots, 8.95@9.95c., large or small crystals, f.o.b. N.Y.

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Austinville, Va., Zinc Ore

A certificate of necessity for accelerated tax amortization for $1,103,440 has been approved by the Defense Production Administration for expanding the facilities at the Austinville, Va., zinc property of the New Jersey Zinc Co. The amount applied for was $1,727,000.

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Tin Consumption Limited to 56,542 Tons in 1951

Domestic consumption of primary tin in 1951 was 56,542 long tons, including 592 tons of Copan alloy produced at the Texas City smelter. The total is 21% below the 71,191 tons consumed in 1950, according to preliminary figures issued by the Bureau of Mines.

Tin controls (Order M-8) were resumed and in effect throughout 1951. On May 1, 1951, the National Production Authority placed tin under allocation.

Receipts, consumption and stocks of tin in 1950 and 1951, in long tons:

Industrial plants:	1950	(c)1951
Stocks at beginning	24,621	31,856
Receipts	115,199	78,775
Supply	139,820	110,631
Stocks end	31,856	20,287
Total processed	107,964	90,344
Intercompany scrap transactions	2,168	2,984
Consumed in mfg.	105,796	87,360
Primary	71,191	(a)55,950
Secondary	33,273	31,410
Plant losses	1,332	(b)

(a) Excluding 592 tons of tin in Copan alloy. (b) Not separately reported. (c) Preliminary.

Tin stocks held by the RFC and industry – comprising pig tin, tin contained in ore, in process, etc., but excluding metal afloat – dropped from 72,887 tons at the beginning of 1951 to 39,975 tons at the end of the year. During 1951, pig tin stocks were depleted 23,256 tons, equivalent to 41% of domestic consumption of primary tin during the year.

Although imports and consumption of primary tin in 1951 were nearly in balance, withdrawals from industry and RFC stocks were necessary because tin brought into the country was mostly committed to the stockpile against previous procurement contracts.

Tin imported for consumption in 1950 and 1951, in long tons:

Ore (tin content):	1950	1951
Belgian Congo	1,526	1,585
Bolivia	14,419	12,869
Indonesia	6,925	11,684
Siam	2,457	3,114
Other	633	152
Totals	25,960	29,404
Metal:		
Belgian Congo	1,506	915
Belgium	8,137	5,377
China	1,665	55
Malaya	54,018	6,975
Netherlands	7,667	12,505
United Kingdom	8,456	1,816
Other	1,388	141
Totals	82,837	27,784

Of the total imports of pig tin in 1951, 45% came from the Netherlands, 25% from Malaya, 23% from Belgium and the Belgian Congo, and the remainder from other sources.

The Government-owned smelter at Texas City produced 31,526 tons of tin in 1951, compared with 32,757 tons in 1950. These totals include the tin content of Copan and a small tonnage of secondary tin recovered from industrial dross.

Domestic mine production of tin was negligible in 1951.

Preliminary figures show that the total mine output of tin in 1951 was 164,800 tons, compared with 165,400 tons in 1950. Malaya accounted for 35% of the total; Bolivia 20%; Indonesia 19%; Belgian Congo 8%; Thailand (Siam) 6%; Nigeria 5%; and all the remaining sources 7%.

World mine production of tin in 1950 and 1951 (preliminary), in long tons of tin contained:

	1950	1951
Malaya	57,537	57,168
Indonesia	32,099	30,994
Burma	1,682	10,500
Thailand	10,364	
Nigeria	8,258	8,550
Belgian Congo	13,700	12,923
Bolivia	31,213	33,130
Others	11,547	11,545
Totals	166,400	164,800

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U.K. Zinc Consumption

Zinc consumption in the United Kingdom declined during 1951 in virtually all classifications. Consumption in 1950 and 1951, by industries, in long tons:

	1950	1951
Brass making	98,242	110,379
Galvanizing	99,318	62,429
Rolled zinc	28,176	21,349
Zinc oxide	47,001	34,742
Zinc alloy	33,406	32,180
Zinc dust	8,872	9,579
Miscellaneous	13,140	13,023
Totals	328,155	283,681
Of which:		
High Grade	112,705	103,324
Low Grade	124,190	84,853
Scrap and remelt	91,260	95,504

Stocks of virgin zinc on Jan. 1, 1952, totaled 39,659 tons, which compares with 31,423 tons on hand a month previous and 36,256 tons a year ago.

Stocks of zinc concentrates in the U.K. on Jan. 1, 1952 contained 38,593 tons of metal, against 38,376 tons a month ago and 44,025 tons on hand a year previous.

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Domestic Lead Shipments Increased in January

Shipments of lead by primary refineries in this country amounted to 40,390 tons in January, which compares with 37,274 tons in December, according to the American Bureau of Metal Statistics. During 1951, shipments averaged 41,348 tons a month.

Production by U.S. refineries increased from 36,754 tons in December to 43,746 tons in January.

Stocks at refineries at the end of January totaled 28,578 tons, which compares with 25,339 on hand a month previous and 33,232 tons on hand in January a year ago.

A summary of the December and January statistics as reported by primary refineries operating in this country, in tons:

	Dec. 1951	Jan. 1952
Stock at beginning	25,871	25,339
Production (a)	36,754	43,746
Domestic shipments	37,274	40,390
Stock at end	25,339	28,578

(a) Includes some secondary lead that it is impracticable to separate month by month.

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DMPA Dolomite Contract

The annual production of dead-burned dolomite, a refractory material used extensively in the steel industry, will be increased about 15% under a contract entered into recently by the Defense Materials Procurement Agency with Basic Refractories, Inc., and its wholly-owned subsidiary, Defense Project, Inc. The contract calls for the construction of a processing plant at Narlo, Ohio, with a rated capacity of 320,000 tons of dead-burned dolomite a year. Estimated cost is $3,500,000, to be financed in part by a loan of $2,625,000, of which 80% of the principal will be guaranteed by the Government.

The Government will have the right to purchase all or any part of the new production during the five-year term of the contract. The present market price for dolomite is $13.50 per ton.

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LOOKING AHEAD IN THE MARKETS

THERE'S A SHOWDOWN COMING on the question of whether it's metal shortages or consumer indifference that is the real brake on production of consumer hard goods. Up to now manufacturers could point to lack of metal as the reason for curtailed output. From now on, it will be up to the sales staff, because the metal to increase production will be coming through.

"OUR MAJOR PROBLEM in the current year," said Gwilym A. Price, president of Westinghouse Electric Corp. in a recent interview, "will be sales, not production." He foresaw an end to "scare-buying" of critical materials, and said that his company plans an early increase in production of consumer durable goods.

WITHIN TWO WEEKS the sentiment in industry has changed. A month ago, for example, predictions that the copper shortage might end this year (*Metal & Mineral Markets*, Feb. 7, 1952) met with scorn and denials from Washington. Now Washington confirms this view with talk of an extra allotment of copper for automobiles next quarter. An easier feeling about metal supplies is spreading.

IT'S NOT THE OLD STORY all over again, however. When this happened in 1949, demand for metals dried up, prices dropped; nobody, not even the stockpilers, bought metal until high-priced inventories were worked off. This time stockpiling and military purchases combine to hold up consumption of metals regardless of fluctuations in demand for consumer goods.

IN COPPER, the custom smelters detect signs of a return of copper scrap to the market. Receipts of scrap have been abnormally low. No amount of government urging could raise them. But the first sign of an easier copper situation abroad does it.

LEAD SCRAP has been moving freely for months. Receipts for November, 1951 were the largest on record. It's a foretaste of what may well develop in copper.

LEAD CONTROLS ARE OFF, at least on the uses to which lead may be put. The need for allocation is ending, but price control seems here for some time.

SPECIAL HIGH-GRADE ZINC will be looking for a market soon. There seems no early end, however, to the tightness in Prime Western. Some galvanizers are using the higher grades, now that steel is becoming more plentiful.

ZINC MADE NEWS as the first of the commodities dealt with by the International Materials Conference to come near being dropped from control, feeling that world markets for zinc have softened enough to warrant it. Several committee members were outvoted recently on a move to omit second-quarter quotas for zinc, world markets for which are softening fast.

EASING IN ALUMINUM SUPPLY puts a new slant on government eagerness to get new factors into the aluminum business. Anaconda is still in, to an as yet undetermined extent, but at least two other copper producers who were approached will take a long time to think it over.

THERE ARE RUMORS that $60 per short ton unit for tungsten ore can be shaded abroad, foreign demand not being as active. The high prices of recent months seem to have brought out more ore than the free market can absorb at top prices.

INACTIVITY ENDED in February in the world's free markets for gold. Volume and prices were up slightly, and it appears that bottom was struck in January. Shaky currencies, rather than war jitters, seem responsible.

MERCURY WAS UP, but it looks like a temporary movement. Chlorine producers quietly entered the market and took a total of about 2,000 flasks. There may be similar movements in antimony oxide; the government seems to have a sudden need for it.

Phosphate Needs Call for Enlarged U. S. Output

Problems to be dealt with in expanding the production of phosphate to meet the sharply increased defense and agricultural needs were discussed at the first meeting of the Phosphate Industry Advisory Committee and officials of the Defense Materials Procurement Agency. The Committee met in Washington on Feb. 27 at the invitation of Jess Larson, DMPA administrator.

Industry officials were advised of projected requirements for defense and agriculture through the mobilization period and invited to offer suggestions for plans which will lead to expanding present mining and producing facilities and the opening of new deposits.

The committee advised DMPA that producers would need Government assistance in obtaining priorities for machinery, equipment and operating supplies if they are to keep pace with the increased demand for phosphate. Another production problem, they pointed out, is the shortage of sulphur for sulphuric acid which is needed by the industry to produce fertilizer. Alternate methods of producing fertilizer without sulphuric acid are being explored, they said.

Advisory committee members were informed that DMPA is now in the process of formulating a phosphate program based upon its own studies and the opinions given it by industry, and that a plan of action would be announced in the near future.

Committee members attending the meeting were:

G. A. Swanson, American Agricultural Chemical Corp., New York; Frank S. Washburn, American Cyanamid Corp., New York; H. C. Moore, Armour Fertilizer Works, Atlanta, Ga.; Francis O. Case, Anaconda Copper Mining Co., New York; J. R. Sheffield, Coronet Phosphate Co., New York; William Caspari, Jr., Davison Chemical Corp., Baltimore, Md.; C. W. Boone, Florida Phosphate Inc., Leesburg, Va.; Fred A. Koechlein, International Minerals & Chemical Corp., Chicago; D. B. Kibler, Jr., Kibler-Camp Phosphate Enterprise, Lakeland, Fla.; Edward Gamble, Monsanto Chemical Co., St. Louis; Bedford Bird, National Farmers Union Service Corp., Denver; D. L. King, San Francisco Chemical Corp., Montpelier, Idaho; J. R. Simplot, Simplot Fertilizer Co., Pocatello, Idaho; R. S. Rydell, Swift & Co., Chicago; C. H. Young, Tennessee Valley Authority, Wilson, Ala.; M. R. Stanley, Victor Chemical Works, Chicago; C. E. Heinrichs, Virginia-Carolina Chemical Corp., Richmond, Va.; and M. C. West, contractor, Columbia, Tenn.

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Tungsten Carbide Division

Allegheny Ludlum Steel Corp. has changed the name of its sintered carbide production and sales units from Carbide Alloys Division to Carmet Division. Carmet is the trade name under which the products of the division are marketed.

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Alloys

BERYLLIUM-COPPER – Master alloy, 4 percent beryllium, remainder copper, 5 lb. ingot, $1.56 per pound of alloy; 3 oz. ingot, $2.09.

FERROCHROMIUM – Per lb. of Cr: High carbon (4 to 9%C) 65 to 69% Cr, lump, carloads, delivered Eastern zone, 21½c.; low carbon, 30½c.

FERROCOLUMBIUM – Per lb. of Cb contained, 50@55 percent, $4.90.

FERROMANGANESE – Per gross ton, 78@82 percent, $185, seaboard.

FERROMOLYBDENUM, Etc. – Per lb. of Mo contained, f.o.b., shipping point: Ferromolybdenum, 55@65 percent Mo $1.32; calcium molybdate ($CaO\ MoO_3$), $1.15; molybdic trioxide (MoO_3), bagged, $1.13, canned, $1.14.

FERROPHOSPHORUS – Per gross ton, 18 percent P, $58.50; electrolytic, 24 percent, $75, f.o.b. Alabama and Tennessee.

FERROSILICON – Per lb. of contained Si, Eastern zone: 50% grade, 12.40c.; 75% grade, 15.60c.

FERROTITANIUM – Per lb. of Ti contained, 20 to 25% max. 0.10% carbon, $1.40.

FERROTUNGSTEN – Per lb. of W contained, 75@80 percent W, $5.00.

FERROVANADIUM – Per lb. of V contained: Open hearth, $3.00; crucible, $3.10; low-carbon and silicon, $3.20. Contract prices.

SILICOMANGANESE – Per lb. carload lots, f.o.b. shipping point, freight allowed, maximum 1½% carbon, 9.9c.

SPIEGELEISEN – Per gross ton, 19 to 21 percent grade, $75, Palmerton, Pa.

ZIRCONIUM ALLOY – 12 to 15 percent Zr, 39 to 43 percent Si, 7c per lb., bulk, carload lots; 35 to 40 percent Zr, 47 to 52 percent Si 20.25c. per lb.

Iron, Steel, and Coke

IRON – Per gross ton, Valley furnaces: Bessemer, $53; basic, $52, and No. 2 foundry, $52.50.

STEEL – Per net ton, f.o.b. mill, Pittsburgh, billets and slabs, $56. Bars per 100 lb., $3.70; plates and structural shapes, $3.65.

COKE – Per ton, Connellsville furnace, $14.50@$15; foundry, $17@$18.

STEEL SCRAP – Per gross ton, delivered Pittsburgh, No. 1 heavy $46.00; No. 2 heavy $44.00, Cleveland, No. 1 heavy $45.00; No. 2 heavy $43.00.

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Lead Average (Monterrey)

The net price realized by the American Smelting & Refining Co. on all of its sales of Mexican pig lead, including metal sold for consumption in Mexico, during the week ended Feb. 23, 1952, was 18.42c. (US) per pound, f.o.b. refinery, Monterrey, Mex.

DAILY PRICES OF METALS *(E&MJ QUOTATIONS)*

Feb.-Mar.	Electrolytic Copper: Domestic Refinery	Electrolytic Copper: Export Refinery	Straits Tin, New York	Lead: New York	Lead: St. Louis	Zinc East St. Louis
28	24.200	27.425	121.500	19.000	18.800	19.500
29	24.200	27.425	121.500	19.000	18.800	19.500
1	No market	27.425	121.500	19.000	18.800	19.500
3	24.200	27.425	121.500	19.000	18.800	19.500
4	24.200	27.425	121.500	19.000	18.800	19.500
5	24.200	27.425	121.500	19.000	18.800	19.500
Average	24.200	27.425	121.500	19.000	18.800	19.500

Average prices for calendar week ended March 1 are: Domestic copper f.o.b. refinery, 24.200c.; export copper f.o.b. refinery 27.425c.; Straits tin, 121.500c.; New York lead, 19.000c.; St. Louis lead, 18.800c.; St. Louis zinc, 19.500c.; and silver, 88.000c.

The above quotations are our appraisal of the major United States markets, based on sales reported by producers and their agencies. They represent payments received by producers for the product. They are reduced to the basis of cash, New York or St. Louis, as noted. All prices are in cents per pound.

Copper, lead and zinc quotations are based on sales for both prompt and future deliveries; tin quotations are for prompt delivery only.

In the trade, domestic copper prices are quoted on a delivered basis; that is, delivered at consumers' plants. As delivery charges vary with the destination, the figures shown above are net prices at refineries on the Atlantic seaboard. Delivered prices in New England average 0.300c. per pound above refinery basis.

Our export quotation for copper reflects prices obtaining in the open market and is based on sales in the foreign market reduced to the f.o.b. refinery equivalent, Atlantic seaboard. On f.a.s. transactions we deduct 0.075c. for lighterage, etc., to arrive at the f.o.b. refinery quotation.

Quotations for copper are for ordinary forms of wirebars and ingot bars. Revised premiums on special shapes, effective in most instances on deliveries beginning Jan. 1, 1951, are: Standard ingots 0.125c. per pound; slabs, 0.375c. and up; cakes 0.425c. and up, depending on weight and dimensions; billets 1.35c. and up, depending on dimensions and quality. Discount on cathodes 0.125c. to 0.15c. per pound.

Quotations for zinc are for ordinary Prime Western brands. Premiums obtaining over Prime Western zinc in the East St. Louis market on the following grades, in cents per pound: Selected 0.10c.; Brass Special, 0.25c.; Intermediate, 0.5c. High Grade zinc sold on contract, delivered in the East and Middle West, commands a premium of 1.35c. per pound over the East St. Louis basis for Prime Western; on Special High Grade the premium or differential is 1.50c. per pound, effective Jan. 1, 1951.

Quotations for lead are for the common grade, and are based on sales of domestically refined metal sold to domestic consumers. The differential on sales in the Chicago district is 10 points under New York; for New England add 7½ points to the New York basis. Corroding grade commands a premium over common lead of 10 points.

Silver, Gold, and Sterling Exchange

Feb.-Mar.	Sterling Exchange "Checks"	Silver: New York	Silver: London	Gold London
28	$2.78⅛	88.000	77d	248s
29	2.78⅛	88.000	77d	248s
1		Not Quoted		
3	2.78¼	88.000	77d	248s
4	2.78⅛	88.000	77d	248s
5	2.78	88.000	77d	248s

Average silver, 88.000c.; Sterling Exchange 278.125c.

The daily New York silver quotation reported by Handy & Harman is for silver contained in ores and other unrefined silver-bearing materials, in cents and fractions of a cent per troy ounce. It is determined by Handy & Harman on the basis of actual sales of bar silver .999 fine in amounts of 50,000 ounces or more for nearby delivery at New York as reported daily by regular suppliers, and is usually one-quarter cent below the price paid for such bar silver, this reduction being allowance to such suppliers for carrying, delivering, and marketing. In addition to foreign silver, the quotation also applies to domestic silver if such silver enters the New York market.

The Treasury's purchase price of newly mined domestic silver was established at 90.5c. per troy ounce, 1000 fine, effective on July 1, 1946 under an amendment to the Silver Purchase Act of July 6, 1939.

London silver quotations are in pence per troy ounce, basis .999 fine.

London gold quotations are per troy ounce, basis 1000 fine.

Sterling quotations represent the demand market in the forenoon.

United States Gold Price

The price paid by the United States Treasury for gold purchased by the mints continued at $35 per troy ounce of fine gold, less ¼ of 1 percent.

Actual payment by the United States Treasury for gold in imported and domestic ore or concentrate is at 99.75 percent of the price quoted by the Treasury, which at present is equal to $34.9125 per ounce.

London Standard Tin

Standard tin on the London Metal Exchange, first session, per long ton:

	Standard Tin: Spot	Standard Tin: 3-Mo.
Feb. 28	£974	£974½
Feb. 29	£976	£976
March 3	£976	£976
March 4	£976	£976
March 5	£976	£976

Tin 99%

Quotations on 99% tin (tin content), New York, were nominally as follows:

Feb. 28th, $1.20½; 29th, $1.20½; March 1st, $1.20½; 3d, $1.20½; 4th, $1.20½; 5th, $1.20½.

Foreign Exchange

Foreign exchange rates on the Mexican peso and the Canadian dollar:

Mexico (silver peso) ..... 11.58c.
Canada (dollar) (a) $1.00

(a) Selling basis, N.Y.

Official London Prices

The following delivered quotations have been fixed by the British Ministry of Metals for the United Kingdom:

	Per Long Ton £	s.	d.
Copper:			
Electrolytic, high conductivity	227	0	0
Fire refined, high conductivity	227	0	0
Fire refined, high grade	226	10	0
Fire refined, min. 99.7 percent	226	0	0
Fire refined, min. 99.2 percent	225	10	0
Lead:			
Soft, foreign duty paid	170	0	0
Soft, Empire	170	0	0
English, refined	171	10	0
Zinc:			
Foreign (G.o.b.) duty paid	190	0	0
Domestic (G.o.b.)	190	0	0
Prime Western and debased	190	0	0
Refined and electrolytic	194	0	0
Minimum 99.99 percent	196	0	0

Specific Ceiling Prices on Brass and Bronze Ingots

The Office of Price Stabilization established ceiling prices for all sales of domestic brass and bronze ingots, except export sales which are covered in CPR-61.

Prices set forth in the new regulation (CPR-127), effective Feb. 27, are those that are presently being charged by manufacturers currently producing about 80% of the total output of ingots.

Brass and bronze ingots are made basically from copper scrap and copper alloy scrap, with primary metal used only when necessary to obtain desired metallic content and metallurgical specifications. Since copper scrap and copper alloy scrap are the basic ingredients from which ingot is made, the price of brass and bronze ingot is established normally at a level sufficiently above the price of the scrap to permit the manufacturer a reasonable return for his operations.

With the outbreak of hostilities in Korea and the increased demand arising out of the defense program, prices for all grades of copper scrap and copper alloy scrap rose sharply. Concurrently, the prices of brass and bronze ingot also rose during the period June 24, 1950 to Jan. 26, 1951, with some manufacturers raising their prices more than others.

On June 21, 1951, OPS established ceiling prices for copper and copper alloy scrap.These prices were generally lower than the ceiling prices for this scrap under the General Ceiling Price Regulation.

On July 31, 1951, OPS reduced the ceiling prices on certain grades of scrap containing tin, to reflect a drop in the domestic price of this metal. With the cost of their principal raw materials thus reduced, the manufacturers of brass and bronze ingots about Sept. 1, 1951, voluntarily reduced their selling prices.

Shortly before the issuance of this regulation, the domestic price of tin was increased by the Reconstruction Finance Corporation and the ceiling prices of certain alloys of ingot containing a high proportion of tin were adjusted upward to reflect the increased cost of primary tin contained.

The amount of the reductions and increases by each manufacturer was not uniform and thus varying prices for ingot are being charged by these manufacturers. In view of the diversity of selling prices, the shortage of copper and copper alloy scrap, and the fact that the present selling prices of ingot are below the ceiling prices established under the General Ceiling Price Regulation. OPS considered it advisable in the interests of stabilization and continued high production to establish uniform ceiling prices for all brass and bronze alloy ingot.

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Brass Ingot Shipments

Shipments of brass and bronze ingots by members of the Defense Council of the Ingot Brass and Bronze Industry during January totaled 28,315 tons, which compares with 20,987 tons in December and 28,416 tons in January a year ago. During 1951, shipments by the group averaged 27,698 tons a month.

The totals account for more than 95% of the deliveries of the entire industry.

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Herzog Metal Corp.

Paul Herzog, who has resigned from the Federated Metals Division of the American Smelting & Refining Co., has formed the Herzog Metal Corp., 20 Pine St., New York, to trade in all grades of nonferrous metals. Mr. Herzog is president of the new company.

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Crucible Steel in Pittsburgh

The general offices of Crucible Steel Company of America have been established in Pittsburgh, it was announced Feb. 28. Headquarters have been established in the Oliver Building. For the last 31 years the general offices of the company have been in New York.

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Aluminum Supply in 1952

At a recent meeting of the Aluminum Products Advisory Committee with NPA, it was stated that, in many cases, material in fabricators' plants is more than adequate to meet authorized CMP allotments.

In view of the easing aluminum supply situation, the committee proposed that a procedure be developed which would give the industry greater flexibility in meeting sudden changes in the supply-requirements balance.

Industry was informed that NPA's estimates of aluminum supplies for 1952 have been revised upward in the light of recent developments. It is now anticipated that the total amount of aluminum metal available during the year will be as follows:

1952:	Pounds
First Quarter	640,000,000
Second "	640,000,000
Third "	710,000,000
Fourth "	740,000,000

Can Inventories Increased

Spokesmen for the Can Manufacturers Industry Advisory Committee informed NPA that can inventories are better at present than they were a year ago because (1) military demand for ration cans has not materialized to the extent expected, (2) crop program goals have not been realized, and (3) can quotas were not entirely taken by some customers.

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Tri-State Concentrates

Joplin, Mo., March 1, 1952

Blende	*Per Ton*
Prime coarse (jig and table 60% zinc)	$135.00
Flotation, 60% zinc	$135.00
Galena	
Coarse and flotation, 80% lead	$245.95

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Brass and Bronze Ingot

85-5-5-5 (No. 115) 27¼c.; 80-10-10 (No. 305) 33c.; 88-10-2 (No. 215) 40c. Yellow, 23¼c. and upward.

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Smelters' Copper Scrap Prices

Custom smelters' buying prices for scrap, carload lots, refinery:

No. 1 heavy copper and wire, 19¼c.; No. 2 heavy copper and wire, 17¾c.; Light copper, 16¼c.; refinery brass, 17¼c.

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Dealers' Scrap Prices

Dealers' buying prices, f.o.b. New York or equivalent freight points, for wholesale quantities, in cents per lb.

No. 1 copper wire	18¾@19¼
Heavy copper & wire, mixed	17¼@17¾
Light copper	16@16¼
No. 1 composition	18¼@18¾
Composition turnings	17¼@17¾
Cocks and faucets	16¼@16¾
Light brass	9¼@10
Yellow brass turnings, mix.	13¼@14
Heavy yellow brass, mixed	13¾@14¼
Auto radiators, unsweated	14¼@15
Brass pipe, cut	16@16¼
Rod brass turnings, No. 1	15@15¼
Rod ends, brass	15½@16
New soft brass clips	17¼@18
Cast aluminum, mixed	7½@8
Aluminum pistons, clean	7½@8
Aluminum crankcases	7¾@8
Aluminum clips, new soft	10¼
Sheet aluminum, old clean.	8
Duralumin clips, new	8
Aluminum turnings, clean	5
Zinc die cast, mixed	6¼@7
Zinc die cast, new	8¼@9¼
Old zinc	10@10¼
New zinc clips	13¼@13¾
Soft or hard lead	15½@16
Battery plates	9¼@9¾
Babbitt mixed	17@17½
Linotype or stereotype	17½@18
Electrotype	16@16¼
Solder joints close cut	21@23
Block tin pipe	1.05@1.10
No. 1 pewter	75@80
Autobearing babbitt	60@62
Monel clips, new	28@30
Monel sheet, clean	28@30
Monel turnings	25@27
Nickel clips, new	35@38
Nickel anodes, cast	35@38

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